

Yanan Zhang

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Education

PhD in Biostatistics, University of South Carolina, Aug 2017 – Aug 2023

M.S in Biostatistics, University of South Carolina, Aug 2015 – May 2017

Fudan University, Sep 2012 – June 2015

B.S. in Medicine, Shandong University, Sep 2007 – July 2012

Teaching Experience

Clinical Assistant Professor, University of South Carolina, Aug 2023- current

- PUBH 724: Quantitative Methods for Public Health Practice I, 2023 Fall
- PUBH 725: Quantitative Methods for Public Health Practice II, 2024 Spring
- BIOS 700: Introduction to Biostatistics, 2004 Spring

Teaching Assistant, University of South Carolina, 2016 Fall

- BIOS810: Survival Analysis

Teaching Training

- Oktoberbest Symposium: Teaching and Learning with Generative AI, 2023 Fall
- Teaching Practicum, University of South Carolina, 2019 Spring
- Teaching Assistant Workshop, University of South Carolina, 2015 Fall
- Teaching Assistant Development course GRAD 701, 2015 Fall

Honors and Awards

- Delta Omega Honorary Society in Public Health (Mu Chapter), May 2017
- Arnold Doctoral Fellowship, 2017

Research Experience

I am interested in statistical methodology within the Bayesian framework and survival analysis. My research interests encompass a wide range of topics, including aging, disability and health, physical activity, cancer, and cardiovascular diseases. I am currently working on projects of

Bayesian Modeling

- A non-parametric factor model with a non-normal outcome distribution
- Bayesian covariance selection in generalized linear mixed effects models

Applied Statistics

- Physical activity, sitting time and overall survival in older adults in the U.S.
- Associations between obesity and adverse cognitive outcomes in older adults in the U.S.
- Association between hormone level and irritable bowel syndrome

Peer-reviewed Publications

1. Mann JR, **Zhang Y**, McDermott S, Wang Y, Cai B, Conway KM, Paramsothy P, Royer J, Venkatesh S, Howard Jr JF, Ciafaloni E. Racial and Ethnic Differences in Timing of Diagnosis and Clinical Services Received in Duchenne Muscular Dystrophy. *Neuroepidemiology*. 2023 May 2;57(2):90-9.
2. **Zhang Y**, Mann JR, James KA, McDermott S, Conway KM, Paramsothy P, Smith T, Cai B, MD STARnet. Duchenne and Becker Muscular Dystrophies' Prevalence in MD STAR net Surveillance Sites: An Examination of Racial and Ethnic Differences. *Neuroepidemiology*. 2021 Jan 21;55(1):47-55.
3. **Zhang Y**, Weaver RG, Armstrong B, Burkart S, Zhang S, Beets MW. Validity of Wrist-Worn photoplethysmography devices to measure heart rate: a systematic review and meta-analysis. *Journal of sports sciences*. 2020 Sep 1;38(17):2021-34.
4. **Zhang Y**, McDermott S, Davis B, Hussey J. High incidence of brain and other nervous system cancer identified in two mining counties, 2001–2015. *Spatial and Spatio-Temporal Epidemiology*. 2020 Feb 1;32:100320.
5. Liu J, **Zhang Y**, Lavie CJ, Tabung FK, Xu J, Hu Q, He L, Zhang Y. Associations of C-reactive protein and fibrinogen with mortality from all-causes, cardiovascular disease and cancer among US adults. *Preventive medicine*. 2020 Oct 1;139:106044.
6. **Zhang Y**, McLain AC, Davis B, McDermott S. Fecundity and infertility among women with disabilities in the United States. *Journal of Women's Health*. 2019 Jul 1;28(7):934-40.
7. Zhan Y, **Zhang Y**, Zhang J, Cai B, Hardin JW. Sample size calculation for a proportional hazards mixture cure model with nonbinary covariates. *Journal of Applied Statistics*. 2019 Feb 17;46(3):468-83.
8. Hong Y, Wang Y, **Zhang Y**, Royer JA, Cai B, Mann JR, McDermott S. Risk factors for falls among boys under 18 years with muscular dystrophy. *Journal of pediatric rehabilitation medicine*. 2019 Jan 1;12(1):3-10.
9. Wang Y, Chen S, Zhang J, **Zhang Y**, Ernstsens L, Lavie CJ, Hooker SP, Chen Y, Sui X. Nonexercise estimated cardiorespiratory fitness and all-cancer mortality: the NHANES III study. In *Mayo Clinic Proceedings* 2018 Jul 1 (Vol. 93, No. 7, pp. 848-856). Elsevier.
10. **Zhang Y**, Zhang J, Zhou J, Ernstsens L, Lavie CJ, Hooker SP, Sui X. Nonexercise estimated cardiorespiratory fitness and mortality due to all causes and cardiovascular disease: the NHANES III study. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*. 2017 Jul 1;1(1):16-25.
11. Feng NN, Fang Y, **Zhang YN**, Xu XW, Li Y, Wang JW, Li YL, Brandt-Rauf P, Xia ZL. Analysis of microRNA expression and micronuclei frequency in workers exposed to vinyl chloride monomer in China. *Epigenomics*. 2017 Aug;9(8):1093-104.
12. Li Y, Feng NN, Zhang GH, Wang Q, Hao YH, **Zhang YN**, Long C, Li Y, Brandt-Rauf PW, Xia ZL. Polymorphisms in the p53 pathway genes and micronucleus occurrence in Chinese vinyl chloride-exposed workers. *International journal of occupational medicine and environmental health*. 2013 Dec;26:825-36.

Presentations

- A Non-parametric Factor Model with Variable Selection under Non-normal Distribution, ENAR, Nashville, March 19-22, 2023.